**WHAT IS CLAIMED IS:**

1. For use with a gateway communicatively coupled to a remote signal source, a local system controller comprising:

a user input device;

a wireless communication circuit configured and arranged to receive input signals sent from the gateway in response to the remote signal source and to send signals including information about the local system to the gateway; and

a control circuit coupled to the user input device and the wireless communication circuit and configured and arranged to communicate control signals to a local system for controlling energy consumption thereof in response to user inputs received via the user input device and to input signals received via the wireless communication circuit.

2. The controller of claim 1, further comprising a thermostat with a temperature sensor, wherein the user input device is configured and arranged to receive thermostat inputs and wherein the control circuit is configured and arranged to control the local system as a function of the thermostat inputs, the temperature sensor and the input signals.

3. The controller of claim 2, further comprising a base including the wireless communication circuit and an antenna for communicating with the gateway, wherein the thermostat includes the user input device and the control circuit and is further configured and arranged to control the wireless communication circuit.

4. The controller of claim 3, wherein the base and thermostat are configured and arranged to replace a conventional thermostat arrangement for an HVAC system and to communicate the control signals to the HVAC system via electrical wires adapted to couple the conventional thermostat to an internal controller for the HVAC system.

5. The controller of claim 1, further configured and arranged to bind to a particular gateway and to respond to input signals from the particular gateway as a function of the binding.

6. The controller of claim 5, further configured and arranged to respond to input signals received only from the particular gateway.

7. The controller of claim 5, wherein the wireless communication circuit is configured and arranged to pass input signals received from the particular gateway to the control circuit as a function of the binding.

8. The controller of claim 5, wherein the control circuit is configured and arranged to respond to input signals received from the particular gateway as a function of the binding.

9. The controller of claim 5, wherein the wireless communication circuit has a unique identification and is configured and arranged to transmit the unique identification to the particular gateway to bind to the particular gateway.

10. The controller of claim 9, wherein the control circuit is configured and arranged to: receive a binding response from the gateway including the unique identification and a control identification, store the control identification and respond to input signals from the gateway that include the control identification.

11. The controller of claim 1, wherein the control circuit is configured and arranged to respond to utility input signals from the gateway indicating a high energy demand period by reducing energy consumption of the local system during the high energy demand period.

12. The controller of claim 1, wherein the control circuit is configured and arranged to control the local system as a function of utility inputs indicating utility pricing information received by the wireless communications circuit from the gateway.

13. The controller of claim 12, wherein the control circuit is configured and arranged to automatically set the local system's energy use as a function of utility rate tier information received from the gateway.

14. The controller of claim 1, wherein the control circuit is configured and arranged to display utility rate tier information received from the gateway for users at the controller and to control the local system in response to user input selections related to the rate tier information.

15. The controller of claim 1, wherein the control circuit and the wireless communication circuit are configured and arranged to send compliance information to the gateway indicative of a condition of compliance of the local system with the input signals.

16. The controller of claim 15, wherein the control circuit and the wireless communication circuit are configured and arranged to send acceptance information to the gateway indicative of a condition of a user's acceptance of an invitation to participate in an energy-saving event advertised via the input signals.

17. The controller of claim 16, wherein the user input device is configured and arranged to receive user inputs indicating the condition of the user's acceptance.

18. The controller of claim 15, wherein the control circuit is configured and arranged to compare the input signals to stored configuration information input via the user input device and to automatically participate in energy-saving events identified via the input signals as a function of the comparison.

19. The controller of claim 18, wherein the control circuit is configured and arranged to override the automatic participation in an energy-saving event in response to overriding inputs received via the user input device and to communicate the override condition to the gateway via the wireless communication circuit.

20. An HVAC control system comprising:

a wireless HVAC controller arrangement including a user input device, a wireless transceiver and a thermostat; and

a wireless gateway configured and arranged to wirelessly communicate control inputs to the HVAC controller via the wireless transceiver in response to remote control signals received from a remote source, the wireless HVAC controller arrangement being configured and arranged to control HVAC equipment as a function of the remote control signals and user inputs received via the user input device and to report characteristics of the operation of the HVAC equipment to the remote source via the wireless gateway.

21. The HVAC control system of claim 20, wherein the wireless HVAC controller arrangement is configured and arranged to receive user inputs for controlling the HVAC equipment and to override the user inputs as a function of the remote control signals received via the wireless gateway.

22. The HVAC control system of claim 20, wherein the wireless HVAC controller arrangement is configured and arranged to receive user inputs for overriding the remote control signals received via the gateway and to communicate the overriding condition to the remote source via the gateway.

23. The HVAC control system of claim 20, wherein the wireless HVAC controller arrangement comprises:

a base including the wireless transceiver and an antenna for wirelessly communicating with the gateway; and

a thermostat enclosure including the thermostat and the user input device and configured and arranged to physically and electrically couple to the base for communicating with and controlling the wireless transceiver.

24. The HVAC control system of claim 20, further comprising a plurality of wireless HVAC controller arrangements, each including a user input device, a wireless transceiver and a thermostat and each being configured and arranged to respond to remote control signals received from the wireless gateway.

25. The HVAC control system of claim 24, wherein the gateway is configured and arranged to individually bind to each of the plurality of wireless HVAC controller arrangements for selectively communicating therewith and wherein each of the HVAC controller arrangements is configured and arranged to process signals as a function of the individual binding.

26. The HVAC control system of claim 25, wherein the gateway is configured and arranged to assign an identifier to each of the plurality of wireless HVAC controller arrangements to bind thereto, the assigned identifiers being in a range of identifier values, and wherein the gateway identifies a wireless signal as a signal coming from one of the plurality of wireless HVAC controller arrangements by determining that an identifier associated with the wireless signal is in the range of identifier values.

27. The HVAC control system of claim 20, further comprising a plurality of wireless HVAC controller arrangements adapted to control environmental conditions in different zones supplied by the HVAC equipment, each including a user input device, a wireless transceiver and a thermostat and each being configured and arranged to respond to remote control signals received from the wireless gateway.

28. The HVAC control system of claim 20, further comprising a second wireless HVAC controller arrangement adapted to control additional HVAC equipment in response to user inputs and remote control signals, said wireless transceiver being configured and arranged to relay remote control signals received from the remote source to the second wireless HVAC controller arrangement and to relay operational characteristics of the additional HVAC equipment from the second wireless HVAC controller arrangement to the remote source via the gateway.

29. The HVAC control system of claim 20, wherein the wireless gateway is configured and arranged to receive remote control inputs from a user via the remote source, the remote control inputs including user inputs for the HVAC equipment, the HVAC controller arrangement being configured and arranged to control the HVAC

equipment as a function of user inputs received with the remote control inputs and overriding user inputs received via the user input device.

30. The HVAC control system of claim 20, wherein the wireless gateway is configured and arranged to receive remote control inputs from a utility company via the remote source, the remote control inputs including utility control inputs for the HVAC equipment, the HVAC controller arrangement being configured and arranged to control the HVAC equipment as a function of the utility control inputs.

31. For use with a gateway communicatively coupled to a remote signal source, a local system controller comprising:

means for receiving user input;

wireless means for receiving input signals sent from the gateway in response to the remote signal source and for sending signals including information about the local system to the gateway; and

control means, coupled to the user input device and the wireless communication circuit, for communicating control signals to a local system for controlling energy consumption thereof in response to user inputs received via the user input device and to input signals received via the wireless communication circuit.

32. An HVAC controller comprising:

a thermostat;

a temperature sensor;

a user interface including an input device and a display;

a transceiver configured and arranged to wirelessly communicate with a utility company source for receiving utility control signals; and

a control circuit configured and arranged to control an HVAC system as a function of the utility control signals, the temperature sensor and user inputs received via the user interface, and further to communicate characteristics of the HVAC system operation to the utility company via the transceiver.

33. The HVAC controller of claim 32, wherein the control circuit and the transceiver are further configured and arranged to pass wireless communications signals as a gateway between the utility company source and at least one other HVAC controller for sending utility control signals to the at least one other HVAC controller for controlling another HVAC system and for reporting HVAC operational characteristics associated with the at least one other HVAC controller to the utility company source.

34. A method for controlling an HVAC system from a remote location, the method comprising:

sending a utility control signal to a local gateway;

in response to the utility control signal, sending a wireless signal from the local gateway to an HVAC controller coupled to control the HVAC system in response to user inputs and the utility control signal;

in response to the wireless signal, setting an operational characteristic of the HVAC system using the HVAC controller; and

reporting actual operational characteristics of the HVAC system with the HVAC controller by sending wireless signals to the remote location via the gateway.

35. The method of claim 34, further comprising:

using a communications identifier associated with signals sent by the gateway to the HVAC controller to identify the HVAC controller as the intended recipient of the signals.

36. The method of claim 35, further comprising:

polling the HVAC controller with the gateway;

in response to the polling, sending a unique identifier from the HVAC controller to the gateway, the unique identifier being unique to the HVAC controller;

sending the communications identifier to the HVAC controller using the unique identifier and storing the communications identifier at the HVAC controller; and

wherein using a communications identifier includes comparing the stored communications identifier with a communications identifier associated with signals from the gateway to identify the HVAC controller as the intended recipient of the signals.

37. A method for installing and operating a system for controlling HVAC equipment in response to utility control signals, the method comprising:

installing a wireless HVAC controller at a user-accessible location remote from the HVAC equipment, the wireless HVAC controller being adapted to receive control inputs for controlling the HVAC system and to control the HVAC system in response to the control inputs, the control inputs including local user inputs and remote utility control signals wirelessly received from a utility company; and

sending wireless utility control signals from the utility company to the wireless HVAC controller and controlling the HVAC system with the wireless utility control signals.

38. The method of claim 37, further comprising installing a gateway configured and arranged to send the wireless utility control signals to the wireless HVAC controller in response to signals sent from a utility company to the gateway.

39. The method of claim 38, further comprising communicatively binding the gateway to the wireless HVAC controller by establishing a unique communications identifier that indicates that a particular signal is intended for the wireless HVAC controller and including the unique communications identifier with the wireless utility control signals sent to the wireless HVAC controller.